Spermophagus atrispinus n. sp. from India and Thailand (Coleoptera: Bruchidae: Amblycerinae)

LECH BOROWIEC

Zoological Institute, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław

ABSTRACT. Spermophagus atrispinus n. sp., collected in Darjeeling (NE India) and Soppong (Thailand) is described. It is the only Paleotropical species with black hind tibial spines. Indian specimens were have been reared from seeds of *Porana racemosa* (Convolvulaceae).

Key words: Entomology, Coleoptera, Bruchidae, Spermophagus, new species, Oriental Region.

The genus Spermophagus Schoenherr, 1833 has been revised recently (Borowiec, 1991). In the revision 90 species were treated as valid. Three more species were described later (Anton 1993, Borowiec 1994). In the material from the United States National Museum (Washington, USA) and Stuttgart Museum (Stuttgart, Germany) I found three specimens representing a new species. Its description is given below.

Spermophagus atrispinus n. sp.

ETYMOLOGY

Named after the black hind tibial spines.

DIAGNOSIS

It is a unique species, the only one with black hind tibial spines and variegate elytra. Only three Palearctic species, S. altaicus Karapetian, S. sericeus (Geoffroy)

and *S. calystegiae* (Lukjanovitsh et Ter-Minassian) have also black hind tibial spines (the latter species has forms with reddish spines). They distinctly differ in uniform elytral vestiture, with no pattern, while in *S. atrispinus* the elytra are maculate, with a pattern of whitish hairs. *S. altaicus* differs also in a reduced basal tooth of claws. All Paleotropical species have reddish hind tibial spines. Elytral pattern in *S. atrispinus* is similar to that found in several species of *S. albosparsus* and *S. niger* groups, common in Oriental Region, but median lobe and lateral lobes of *S. atrispinus* are similar to the genitalia of Ethiopian species of *S. multipunctatus* group.

DESCRIPTION

Length (pronotum-elytra): 2.3-2.5 mm, width: 1.7-1.8 mm. Body oval.

Black, including hind tibial spines. Vestiture moderately dense, not covering body surface, brown and white. Pale hairs form a distinct pattern on pronotal disc as in fig. 1. Scutellum completely covered by white hairs. Elytra with pattern as in fig. 1. Pygidium and sternites II-V, and dorsolateral part of sternite I uniformly white pubescent except indistinct brown spot in dorsolateral part of sternites II-IV. Lateral plates of thorax covered by dense white hairs. Ventral plates of thorax and sternite I (except dorsolateral part) with scarce grayish pubescence.

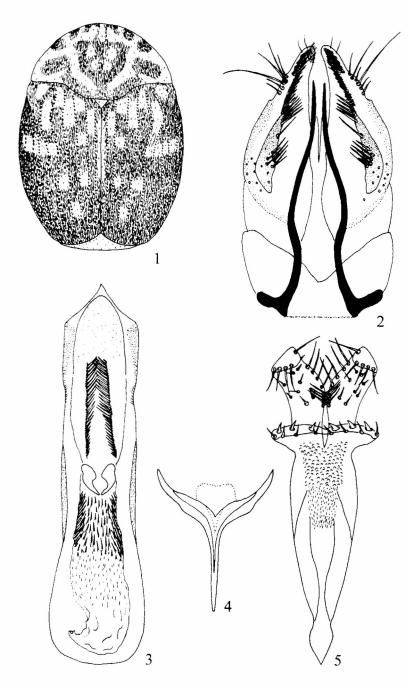
Head short, eyes emarginate to half length, with 6-7 facets beyond incision of antenna. Distance between eyes about one third of greatest width of eye. Frons flat, with very short, hardly marked median keel. Antennae long, extending to half length of elytron. Segment 3 in female 1.5 times, in male twice longer than segment 2, segments 8-10 about twice longer than wide, segment 11 about 2.2 times longer than wide.

Pronotum 1.4 times wider than long, doubly punctured, large punctures dense, disposed almost uniformly on whole disc. Lateral margin in lateral view in female almost straight, in male convex. Scutellum small, triangular.

Elytra about twice longer than pronotum with maximum width in 1/3 length. Humeral calli distinct. Elytral striac distinctly punctate, intervals with irregular row of large punctures.

Sternites without impressions or tubercles. Hind legs with no sexual characters. Tibia without dorsolateral carina, lateral carina minutely serrate only in distal half. Apical spines sharp, long, external spine about 1.5 times longer than the greatest width of tibia, internal spine only slightly shorter. Claws with large basal tooth.

Male. Ventral margin of antennal segments 3-7 with row of dense, erected hair. Abdomen telescoped, sternum V emarginate up to base, sternites II-IV in the middle very short. Median lobe elongate, ventral valve pentagonal, apex acute, apex of dorsal valve obtuse. Internal sac in the middle with a pair of hook-like sclerites (fig. 3). Anterior to the sclerites two bands of long and dense needles, behind the sclerites moderately large, elongate spines and short needles. Lateral lobes strongly modified, each lobe divided in two lobes, dorsal lobe tape-like but moderately elongate, with long setae only on ventral and apical margins, surface with several short setae. Ventral lobe very short, transverse, anterior margin with row of six



1-5. Spermophagus atrispinus n. sp.: 1 - dorsal pattern, 2 - ovipositor, 3 - median lobe, 4 - spiculum gastrale, 5 - lateral lobes

squamiform setae and parallel row of eight needle-like setae. Basal plate narrowed basally and apically with maximum width in 1/4 length. Anterior part of the basal plate with squamiform microsculpture (fig. 5). Spiculum gastrale Y-shaped, simple, lateral branches without process (fig. 4).

Female. Ventral margin of antennal segments 3-7 without row of erected hair. Abdomen less telescoped, sternum V emarginate to half length, sternites II-IV in the middle longer than in male. Ovipositor unmodified, moderately long, apical lobes with longitudinal suture of dense hairs, apex obtuse. Pecten with enlarged, feebly pigmented base and strongly narrowed apical part, seteae group in enlarged basal part and narrow apex. Circular pigmentation hardly marked (fig. 2).

Host plant: Convolvulaceae: Porana racemosa (specimens from India were reared from seeds; seed-shells were stuck to the pine with beetles).

Type

Holotype male and allotype female: [India]: "Porana racemosa, Darjeeling, PQ + CA #, AI 8774, II.V.32"; paratype female: " THAI, 10-15/5.1993, 19°27N 98°20E, SOPPONG 1550 m, Vit Kubáň leg."; holo- and allotype preserved in United States National Museum, Washington, USA, paratype in Stuttgart Museum, Stuttgart, Germany.

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to Dr. J.M. KINGSOLVER (USNM) and Dr. W. Schwaller (Stuttgart Mus.) for the loan of the specimens.

REFERENCES

- Anton, K.-W., 1993. Description of two new species of the genus Spermophagus Schoenherr (Coleoptera, Bruchidae, Amblycerinae) from the Oriental Region. Entomol. Basiliensia, 16: 377-383.
- Borowiec, L., 1991. Revision of the genus Spermophagus Schoenherr (Coleoptera, Bruchidae, Amblycerinae). Genus, suppl., Wrocław, 198 pp.
- Borowiec, L., 1994. Spermophagus prevetti n. sp. from Nigeria (Coleoptera: Bruchidae). Genus, 5: 165-167.